

# Foreword

## How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

## For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. Because of the limited space, snow survey measurements are not published in monthly reports. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 97102
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97208
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 547, Portland, OR 97209.

### Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

# **Utah Water Supply Outlook**

**and**

**Federal – State – Private  
Cooperative Snow Surveys**

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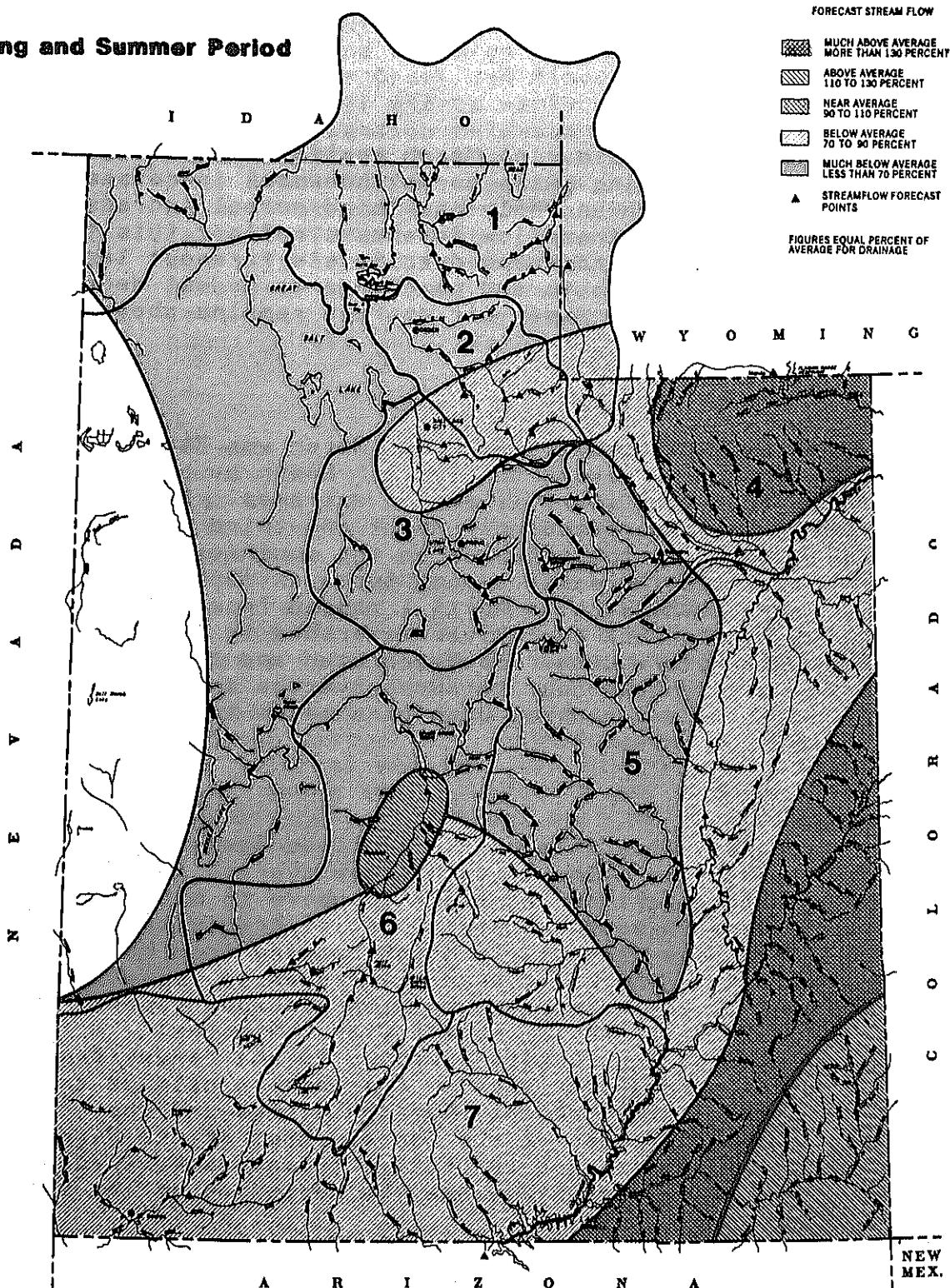
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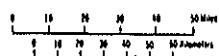
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# Streamflow Prospects for Utah

**Spring and Summer Period**



1 BEAR RIVER BASIN  
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 7 E. GARFIELD, KANE, WASHINGTON & IRON CO.



## GENERAL OUTLOOK

### SUMMARY:

Storm patterns during March continued tracking to the south producing twice normal snowpack increases in southern Utah and only one-third normal increases in the north. Streamflow forecasts reflect this trend with healthy increases over levels forecast last month in the south and no change to modest decreases in the north. Reservoir storage remains above average.

### SNOWPACK:

Snowpack accumulation during March was 7% greater than normal across the State. Basin by basin, however, the story is one of extremes. Bear River snowpack increased only about one-third as much as usual while the snowpack in the southwestern area of the state increased almost twice as much as normal in March. Snowpack on April 1 ranged from 55% of average on the Bear River watershed to 94% in southwestern Utah. Southern Utah and the Uintas generally have near to above average snowpack while northern and central Utah have below to much below average snowpack.

### PRECIPITATION:

Precipitation at mountain stations again this month varied from below to much below average in the northern part of the State to above to much above average in southern Utah. Valley precipitation was also quite variable in March ranging from below normal in the Lower Bear River area to above normal east of the Wasatch range with numerous reports above 150% of average in eastern Utah. Seasonal precipitation (October through March) ranges from below normal over much of the western half of the State to above normal over the Uintas and the southeast corner of the State. Most of the Virgin, Beaver, Sevier and San Rafael drainages have received near normal amounts since the beginning of the water year.

### RESERVOIRS:

Useable stored water in 26 key irrigation reservoirs across the State was 123% of average at the end of March. All reservoirs in our sample for which averages are available were holding more water than usual for this time of year in anticipation of

projected low runoff this season. Current storage compared to capacity ranges from 57% on Pineview to full on about one-fourth of the reservoirs sampled. As of the end of March it was questionable as to whether Deer Creek and Pineview would fill completely unless runoff starts early and the reservoirs fill before irrigation releases begin. The Enterprise reservoirs are probably near their seasonal peak with only about 30% of capacity stored. The Great Salt Lake is at an historical peak elevation of 4211.85 feet, 1.35 feet higher than last year at this time; and is expected to peak, with average Spring precipitation, near a new record peak of 4212.25 feet late this Spring. Large pumps are slated to begin pumping lake water into the west desert this month.

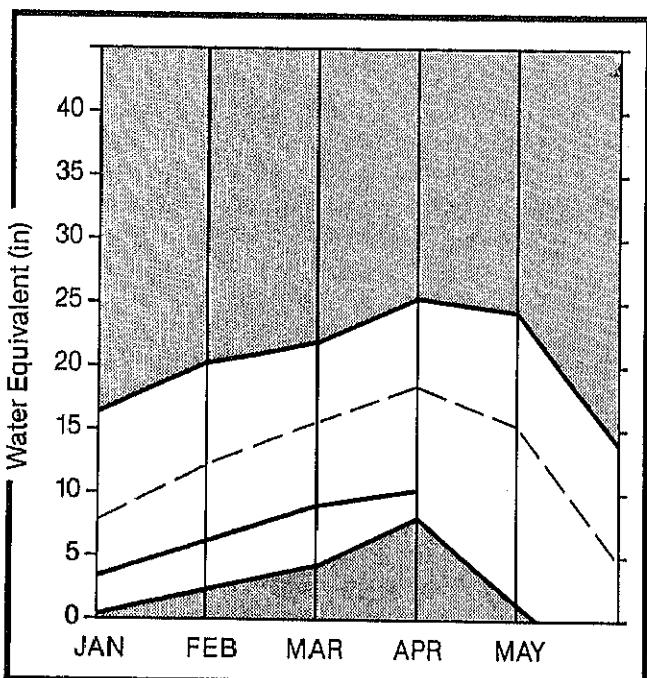
#### ~~STREAMFLOW:~~

Forecasts of spring and summer streamflow have generally remained the same or decreased in northern Utah compared to the forecasts issued last month while southern Utah forecasts have generally increased. Projected flow for the Bear near Harer is only about one-third normal because of the extremely low forecasts on the Wyoming tributaries. Elsewhere the picture is brighter with forecasts generally ranging from 60-80% of average on the Upper Bear, Weber, Provo, Duchesne, San Rafael and Virgin. Near to above average flows are projected for Uinta streams east of the Duchesne, most of the Sevier and the Colorado and San Juan Rivers. Some shortages may occur where stored water is not adequate to augment low natural streamflow, such as is possible on the Lower Bear.

Forecasts prepared for this bulletin represent cooperative efforts of the Soil Conservation Service and the National Weather Service in an effort to provide the best possible service to water users and managers.

## Bear River Basin

Mountain snowpack\* (inches)



\*Based on selected stations

Maximum      [Solid Line with Dots]      Average      [Dashed Line]  
Minimum      [Solid Line with Dots]      Current      [Solid Line]

### WATER SUPPLY OUTLOOK:

Snowpack on the Bear River as of the first of April was only 55% of average. During March the snowpack increased only 36% as much as normal. Snowpack on the Logan River watershed was 47% and the Raft River mountains were at 63%. Streamflow forecasts are the same or slightly less than last month. Forecasts now range from 27 to 78% of average spring and summer streamflow. Reservoir storage is above average for this time of year. Porcupine reservoir is full.

For more information contact your local  
Soil Conservation Service Office:  
Tremonton Field Office    801-257-5403  
Logan Field Office        801-753-5616

**BEAR RIVER BASIN**

**STREAMFLOW FORECASTS**

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BEAR RIVER near UT-WY Stateline	APR-JUL	116.0	90.0	78	110.0	95	71.0	61
BEAR near Woodruff	APR-JUL	144.0	82.0	57	125.0	87	42.0	29
WOODRUFF CREEK near Woodruff	APR-JUL	17.3	9.5	55	13.0	75	6.0	35
BIG CREEK near Randolph	APR-JUL	5.3	3.0	57	6.0	113	1.0	19
BEAR near Randolph	APR-JUL	126.0	70.0	56	136.0	108	25.0	20
THOMAS FORK near Stateline	APR-SEP	37.0	10.0	27	18.0	49	2.0	5
SMITHS FORK near Border	APR-SEP	122.0	54.0	44	81.0	66	27.0	22
BEAR RIVER near Harer	APR-SEP	326.0	110.0	34	182.0	56	48.0	15
LOGAN RIVER near Logan	APR-JUL	122.0	75.0	61	92.0	75	59.0	48
BLACKSMITH FORK near Hyrum	APR-JUL	57.0	35.0	61	50.0	88	21.0	37
LITTLE BEAR RIVER near Paradise	APR-JUN	42.0	25.0	60	41.0	98	9.0	21
CUB RIVER near Preston	APR-JUL	46.0	20.1	43	38.0	81	8.0	17

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
	THIS YEAR	LAST YEAR	AVG.		
BEAR LAKE	1421.0	1086.2	1089.0	1002	55 69
HYRUM	15.3	13.4	10.7	12.2	44 51
PORCUPINE	11.3	11.3	11.3	5.0	47 36
WOODRUFF NARROWS		NO REPORT			49 65
WOODRUFF CREEK		NO REPORT			40 47
					43 53
					36 47
					42 63
					46 55
					BEAR RIVER BASIN

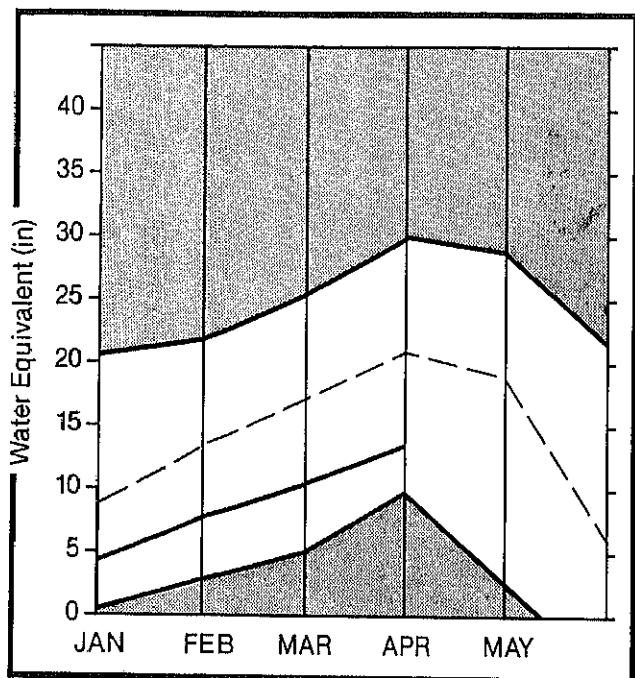
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

## Weber & Ogden Watersheds

Mountain snowpack\* (inches)



\*Based on selected stations

Maximum           Average        
Minimum           Current     

### WATER SUPPLY OUTLOOK:

During March the snowpack on the Weber River drainage increased only 74% as much as usual. April first snowpack was 59% of normal on the Ogden and 68% on the Weber. Streamflow forecasts are little changed from those released last month. Forecasts range from 60% of the April-June average on Wheeler Creek near Huntsville to 87% on Hardscrabble Creek near Porterville. Above average supplies of stored water are reported for all major reservoirs in the Weber Basin. All reservoirs should fill except, possibly, Pineview.

For more information contact your local  
Soil Conservation Service Office:  
Layton Sub Office      801-544-9144

**WEBER & OGDEN WATERSHEDS in Utah**

**STREAMFLOW FORECASTS**

FORECAST POINT	FORECAST PERIOD	25 YR, AVG, (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS, MAX, (1000AF)	REAS, MAX, (% AVG.)	REAS, MIN, (1000AF)	REAS, MIN, (% AVG.)
WEBER RIVER near Oakley	APR-JUN	107.0	85.0	79	101.0	94	61.0	57
ROCKPORT RESERVOIR inflow	APR-JUN	120.0	86.0	72	112.0	93	50.0	42
CHALK CREEK near Coalville	APR-JUN	41.0	32.0	78	41.0	100	24.0	59
WEBER RIVER near Coalville	APR-JUN	127.0	91.0	72	120.0	94	66.0	52
LOST CREEK near Croyden	APR-JUN	15.6	10.0	64	15.0	96	5.0	32
EAST CANYON CREEK near Morgan	APR-JUN	29.0	21.0	72	29.0	100	15.0	52
HARDSCRABBLE CREEK near Porterville	APR-JUN	18.4	16.0	87	24.0	130	8.0	43
SOUTH FORK OGDEN RIVER near Huntsvil	APR-JUN	58.0	40.0	69	52.0	90	27.0	47
PINEVIEW RESERVOIR inflow	APR-JUN	122.0	78.0	64	100.0	82	56.0	46
WHEELER CREEK near Huntsville	APR-JUN	6.3	3.8	60	5.0	79	3.0	48
ECHO RESERVOIR inflow	APR-JUN	143.0	120.0	74	157.0	96	87.0	53
WEBER RIVER at Gateway	APR-JUN	326.0	225.0	69	281.0	86	169.0	52
FARMINGTON CREEK near Farmington	APR-JUL	8.2	5.7	70	9.0	110	2.0	24

RESERVOIR STORAGE (1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES	THIS YEAR AS % OF
		THIS YEAR	LAST YEAR	AVG.			
CAUSEY	6.9	4.4	2.8	2.6	OGDEN RIVER	4	44 59
EAST CANYON	48.1	38.5	33.6	36.6	WEBER RIVER	14	55 66
ECHO	73.9	66.2	23.5	49.5	WEBER & OGDEN WATERSHEDS	18	52 64
LOST CREEK	20.0	16.2	9.4	13.3			
PINEVIEW	110.1	42.6	71.6	55.6			
ROCKPORT	60.9	41.2	26.6	30.9			
HILLARD BAY	165.5	164.9	186.6	125.3			

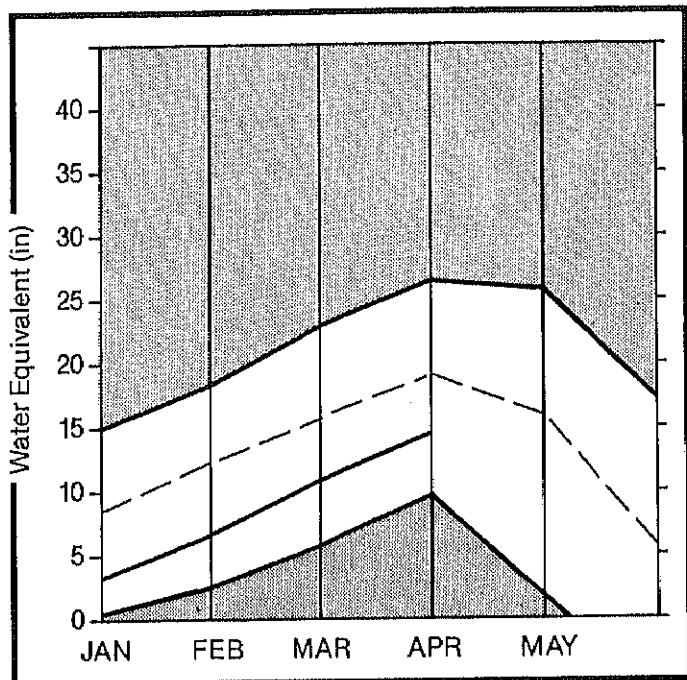
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2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

# Utah Lake, Jordan River & Tooele Valley

Mountain snowpack\* (inches)



\*Based on selected stations

Maximum           Average        
Minimum           Current     

## WATER SUPPLY OUTLOOK\$

March, like February, saw above average increases to the snowpack. During March, the snowpack increased 16% more than normal bringing the snow water content to 77% of average for the Utah Lake, Jordan River, and Tooele Valley watersheds by April 1. The Provo River watershed remains low, however, at only 58% of average. Streamflow forecasts now range from 50 to 95% of average. Reservoir storage is above average and near capacity for all reservoirs with established averages.

For more information contact your local  
Soil Conservation Service Office:  
Midvale Field Office      801-524-4373  
Provo Field Office      801-377-5580

**UTAH LAKE, JORDAN RIVER & TOOELE VALLEY**

**STREAMFLOW FORECASTS**

POINT	FORECAST PERIOD	25 YR, AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
Hailstone	APR-JUL	113.0	73.0	65	93.0	82	45.0	40
Deer Creek Dam	APR-JUL	133.0	89.0	67	117.0	88	60.0	45
RK near American Fk.	APR-JUL	34.0	25.0	74	30.0	88	22.0	65
RK near Springville	APR-JUL	23.3	14.0	60				
RESERVOIR inflow	APR-JUL	60.0	33.0	55	42.0	70	23.0	38
RK near Payson	APR-JUL	7.3	5.1	70				
inflow	APR-JUL	255.0	280.0	95	363.0	123	209.0	71
BONWOOD CRK near SLC	APR-JUL	41.0	30.0	73	35.0	85	27.0	66
OOD CRK near SLC	APR-JUL	39.0	36.0	92	40.0	103	31.0	79
IEK near SLC	APR-JUL	17.0	12.6	74	18.0	104	9.0	53
near SLC	APR-JUL	6.9	6.5	94	8.0	114	5.0	72
CREEK near SLC	APR-JUL	4.6	2.5	54				
near SLC	APR-JUL	9.0	6.2	69	8.0	89	5.0	56
CREEK near Tooele	APR-JUL	2.3	2.0	87	3.0	130	1.0	49
W CREEK near Grantsville	APR-JUL	3.0	1.9	63	3.0	100	1.0	33
EK near Vernon	APR-JUN	1.2	0.6	50	1.2	101	0.9	21

**RESERVOIR STORAGE (1000AF)**

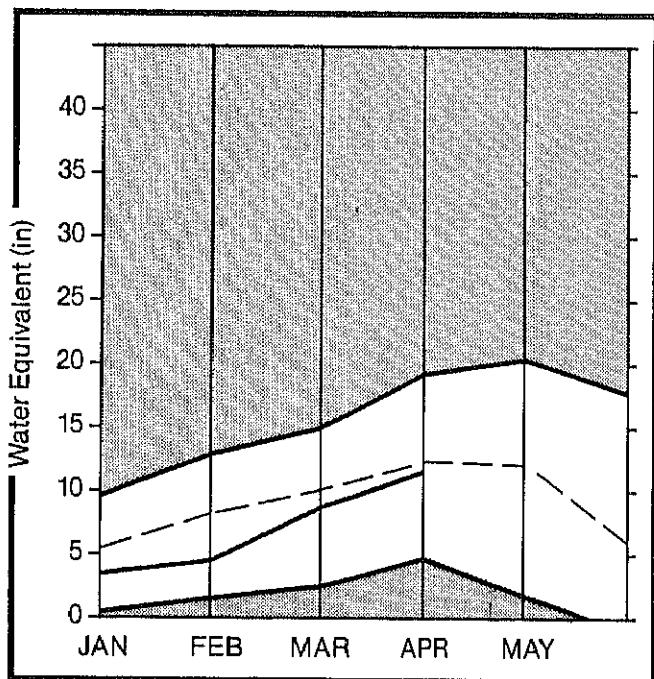
**WATERSHED SNOWPACK ANALYSIS**

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES	THIS YEAR AS % OF LAST YR. AVERAGE
		THIS YEAR	LAST YEAR	AVG.			
E	149.7	139.0	108.8	97.9	PROVO RIVER & UTAH LAKE	10	54 65
E	3.3	0.9	0.2	---	PROVO RIVER	5	43 58
CREEK	1.0	0.9	0.8	0.6	JORDAN RIVER & GREAT SALT	6	75 84
ENLARGED	951.4	540.1	525.8	---	TOOELE VALLEY WATERSHEDS	5	123 97
EK	883.9	678.0	1015.3	722.9	UTAH LAKE, JORDAN RIVER &	21	73 77
EK	0.6	0.6	0.6	0.5			

max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below,  
stated for upstream diversions or changes in reservoir storage.  
Re is computed for the 1961-85 base period.

## Uintah Basin & Dagget SCD's

Mountain snowpack\* (inches)



\*Based on selected stations

Maximum      [Solid Dark Gray Box]      Average      [Dashed Line]       
Minimum      [Solid Light Gray Box]      Current      [Solid Black Line]

### WATER SUPPLY OUTLOOK†

Snowpack on the Uintas ranges from 65% of the April 1 average on the Strawberry River watershed to 131% on Sheep Creek. Snow water content on Blacks Fork snow courses was 94% of average and 81% on the Duchesne. Forecasts of spring and summer streamflow range from 53% for Currant Creek near Fruitland to 104% for Henrys Fork near Manila. Stored water in Uinta Basin reservoirs with established averages is 143% of average and 94% of capacity.

For more information contact your local  
Soil Conservation Service Office:  
Roosevelt Field Office 801-722-4621

**UINTAH BASIN & DAGGET SCD'S**

**STREAMFLOW FORECASTS**

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
DUCHESENE RIVER near Tabiona	APR-JUL	105.0	70.0	67	85.0	81	55.0	52
DUCHESENE RIVER near Duchesne	APR-JUL	189.0	127.0	67	159.0	84	99.0	52
STRAWBERRY RIVER at Duchesne	APR-JUL	69.0	38.0	55	50.0	72	28.0	41
ROCK CREEK near Mountain Home	APR-JUL	95.0	68.0	72	85.0	89	53.0	56
CURRENT CREEK near Fruitland	APR-JUL	20.0	10.5	53	14.0	70	7.0	35
LAKEFORK RIVER near Mountain Home	APR-JUL	70.0	60.0	86	76.0	109	48.0	69
YELLOWSTONE RIVER near Altonah	APR-JUL	66.0	62.0	94	87.0	132	37.0	56
DUCHESENE near Myton	APR-JUL	223.0	145.0	65	203.0	91	76.0	34
WHITE ROCKS RIVER near Whiterocks	APR-JUL	60.0	60.0	100	83.0	138	37.0	62
UINTAH RIVER near Neola	APR-JUL	86.0	80.0	93	114.0	133	46.0	53
DUCHESENE near Randlett	APR-JUL	257.0	190.0	74	370.0	144	60.0	23
WEST FORK DUCHESENE RIVER near Hanna	APR-JUL	28.0	16.5	59	21.0	75	12.0	43
HENRY'S FORK near Manila	APR-SEP	51.0	53.0	104	72.0	141	39.0	76
BLACK'S FORK near Millburne	APR-JUL	90.0	75.0	83	105.0	117	50.0	56
FLAMING GORGE RESERVOIR inflow	APR-SEP	1445.0	950.0	66	1253.0	87	675.0	47
ASHLEY CREEK near Vernal	APR-JUL	52.0	51.0	98	62.0	119	42.0	81

**RESERVOIR STORAGE (1000AF) | WATERSHED SNOWPACK ANALYSIS**

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES	THIS YEAR AS % OF LAST YR.	AVERAGE
		THIS YEAR	LAST YEAR	Avg.				
FLAMING GORGE	3749.0	2983.4	2913.3	---	UPPER GREEN RIVER in UTAH	15	80	98
MOON LAKE	35.8	27.9	25.0	18.3	ASHLEY CREEK	2	77	84
RED FLEET	26.0	17.7	20.8	---	BLACK'S FORK RIVER	3	80	94
STEINAKER	33.3	32.2	32.6	22.6	SHEEP CREEK	2	127	131
STARVATION	165.3	161.2	134.0	114.1	DUCHESENE RIVER	16	59	61
STRAWBERRY-ENLARGED	951.4	540.1	528.8	---	LAKE FORK-YELLOWSTONE CRE	3	64	92
					STRAWBERRY RIVER	4	52	65
					UINTAH-WHITEROCKS RIVERS	4	63	93
					UINTAH BASIN & DAGGET SCD	31	67	88

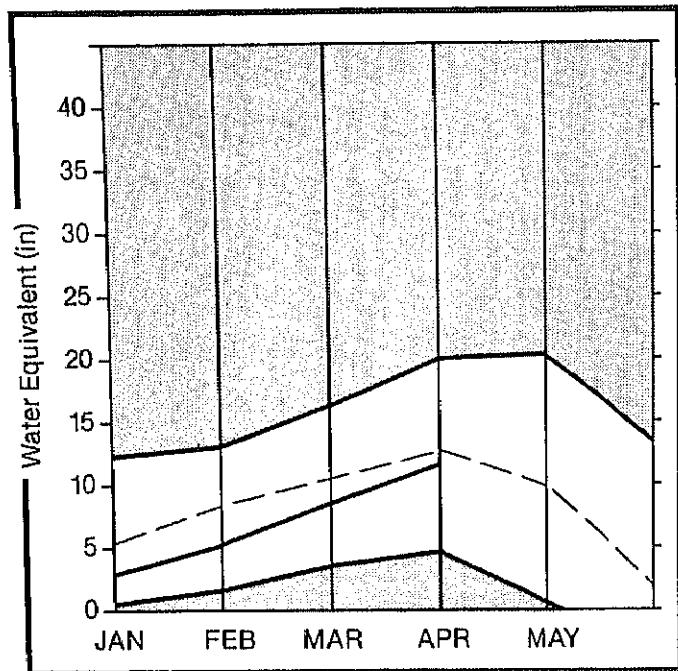
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2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

# Carbon, Emery, Wayne, Grand, and San Juan Co.

Mountain snowpack\* (inches)



\*Based on selected stations

Maximum         Average      
Minimum         Current   

## WATER SUPPLY OUTLOOK†

March was a good month for snowpack accumulation in southeastern Utah this year. During March the snowpack increased 41% more than normal, leaving area-wide snowpack at 89% of the April 1 average. Basin by basin snowpack now ranges from 69% of average on the Muddy River to 130% on the La Sals. Streamflow forecasts range from 52% of average for Scofield Res. Inflow to 128% for the San Juan near Bluff. Area reservoirs are holding 34% more useable water than normal for this time of year.

For more information contact your local  
Soil Conservation Service Office:  
Price Field Office    801-637-0041

CARBON, EMERY, WAYNE, GRAND, & SAN JUAN Co.

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
GOOSEBERRY CREEK near Scofield	APR-JUL	12.0	6.6	55	10.0	83	4.0	33
SCOFIELD RESERVOIR inflow	APR-JUL	46.0	24.0	52	32.0	70	17.0	37
PRICE near Heiner	APR-JUL	78.0	44.0	56				
ELECTRIC LAKE Inflow	APR-JUL	15.1	9.5	63	12.0	79	7.0	46
HUNTINGTON CREEK near Huntington	APR-JUL	55.0	31.0	56	41.0	75	23.0	42
COTTONWOOD CREEK near Orangeville	APR-JUL	47.0	32.0	68	46.0	98	18.0	38
FERRON CREEK near Ferron	APR-JUL	41.0	25.0	61	34.0	83	16.0	39
MUDY CREEK near Emery	APR-JUL	21.0	12.5	60	18.0	86	7.0	33
COLORADO near Cisco, UT	APR-JUL	3440.0	3500.0	102	4533.0	132	2639.0	77
GREEN near Green Rv., UT	APR-JUL	3176.0	2375.0	75	3074.0	97	1676.0	53
HILL CREEK near Moab	APR-JUL	5.5	6.0	109	7.0	127	5.0	91
NAVAJO RESERVOIR inflow	APR-JUL	764.0	925.0	121	1208.0	158	703.0	92
SAN JUAN near Bluff, UT	APR-JUL	1091.0	1400.0	128	1836.0	168	1062.0	97
SEVEN MILE CREEK near Fish Lake	APR-JUL	6.5	5.5	85	7.0	108	4.0	62

RESERVOIR STORAGE (1000AF)				WATERSHED SNOWPACK ANALYSIS				
RESERVOIR	USEABLE CAPACITY I	** USEABLE STORAGE **	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	LAST YR.	AVERAGE	
HUNTINGTON NORTH	3.9	4.0	3.7	3.8	PRICE RIVER	3	72	74
JOE'S VALLEY	54.6	45.7	47.0	45.6	SAN RAFAEL RIVER	7	66	75
KEN'S LAKE	2.3	1.5	1.4	---	MUDY RIVER	2	69	69
HILL SITE	16.7	12.5	7.4	4.6	FREMONT RIVER	4	111	101
SCOFIELD	65.8	55.0	43.7	33.9	LASAL MOUNTAINS	2	140	130
					BLUE MOUNTAINS	2	131	107
					CARBON, EMERY, WAYNE, GRA	21	68	69

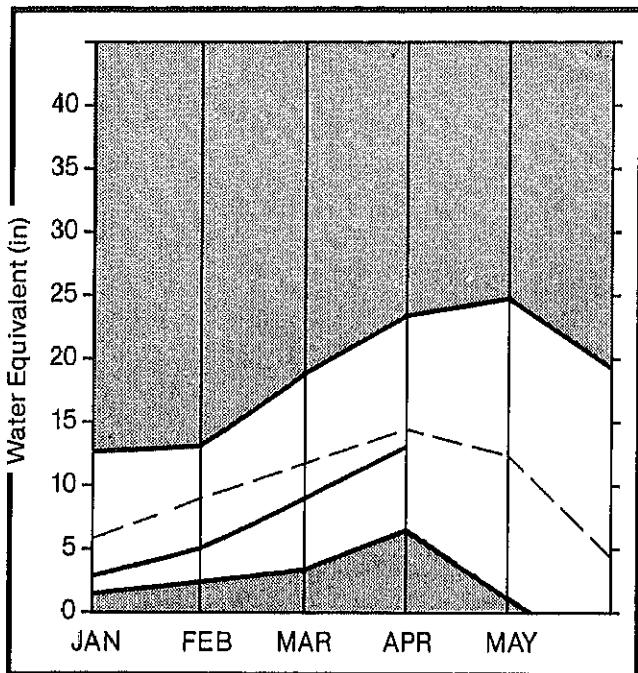
1 - Reas. max, and reas. min, forecasts are for 5% and 95% exceedance levels and also (2) below,

2 - Corrected for upstream diversions or changes in reservoir storage,

The average is computed for the 1961-85 base period.

## Sevier & Beaver River Basins

Mountain snowpack\* (inches)



\*Based on selected stations

Maximum           Average        
Minimum           Current     

### WATER SUPPLY OUTLOOK:

Snowpack accumulation during March was 70% greater than normal bringing April 1 snow water content to 92% of average across the Sevier Basin. The Beaver River watershed is at 76% of average and the East Fork of the Sevier has 103% of normal April 1 snow water. Streamflow forecasts have generally increased from last month and now range from 50 to 198% of average. Reservoir storage is very good again this year with area reservoirs at 161% of average for the end of March which is 98% of capacity.

For more information contact your local  
Soil Conservation Service Office:  
Richfield Field Office 801-896-6261  
Pittmore Field Office 801-743-6655

**SEVIER & BEAVER RIVER BASINS**

**STREAMFLOW FORECASTS**

FORECAST POINT	FORECAST PERIOD	25 YR, AVG, (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS, MAX, (1000AF)	REAS, MAX, (% AVG.)	REAS, MIN, (1000AF)	REAS, MIN, (% AVG.)
SEVIER at Hatch	APR-JUL	52.0	49.0	94	65.0	125	37.0	71
SEVIER near Circleville	APR-JUL	44.0	45.0	102				
SEVIER near Kingston	APR-JUL	34.0	30.0	88	51.0	150	13.0	38
ANTIMONY CREEK near Antimony	APR-JUL	8.9	8.0	90				
E F SEVIER near Kingston	APR-JUL	24.0	24.0	100	38.0	158	16.0	67
SEVIER b/w Piute Dam	APR-JUL	56.0	50.0	89	86.0	154	21.0	38
CLEAR CREEK near Sevier	APR-JUL	22.0	21.6	98				
SIGURD to GUNNISON	APR-JUL	44.0	37.0	198	122.0	277	53.0	120
KINGSTON to VERMILLION DAM	APR-JUN	40.0	34.0	135				
VERMILLION DAM to GUNNISON	MAR-JUN	54.0	68.0	163				
SALINA CREEK at Salina	APR-JUN	18.2	15.3	84				
SEVIER nr Gunnison	APR-JUL	99.0	122.0	123				
CHALK CREEK near Fillmore	APR-JUL	16.4	13.0	79	17.0	104	9.0	55
CHICKEN CREEK near Levan	APR-JUL	3.5	2.2	63	3.0	86	1.0	29
OAK CREEK near Oak City	APR-JUL	1.6	0.8	50	2.0	125	0.0	0
EPHRAIM CREEK near Ephraim	APR-JUL	25.0	19.8	79				
PLEASANT CREEK near Pleasant	APR-JUL	11.5	8.1	70				
SALT CREEK near Nephi	APR-JUL	13.5	10.0	74	20.0	148	2.0	15
BEAVER RIVER near Beaver	APR-JUL	27.0	22.0	81	33.0	122	11.0	41
NORTH CREEK near Beaver (combined N	APR-JUL	14.6	12.4	88	23.0	158	4.0	27
MINERSVILLE RESERVOIR inflow	APR-JUN	8.9	8.0	90	12.0	135	4.0	45

RESERVOIR STORAGE (1000AF) | | WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF
	THIS YEAR	LAST YEAR	Avg.		LAST YR. AVERAGE
GUNNISON	20.3	20.3	18.5	16.0	138 101
MINERSVILLE (RkyFd)	26.0	23.6	22.9	14.3	135 103
OTTER CREEK	52.6	52.4	52.5	35.8	134 100
PIUTE	71.8	70.5	71.7	46.2	93 90
SEVIER BRIDGE	236.0	232.9	224.3	196.2	56 74
PANQUITCH LAKE	22.3	17.4	20.0	—	97 92
SEVIER & BEAVER RIVER BAS					

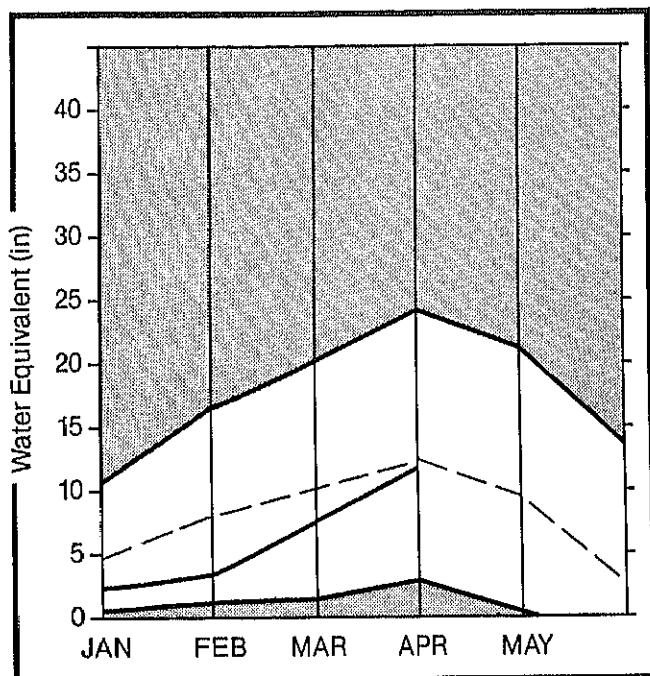
1 - Reas, max, and reas, min, forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

## E. Garfield, Kane, Washington, & Iron Co.

Mountain snowpack\* (inches)



\*Based on selected stations

Maximum         Average      
Minimum         Current   

### WATER SUPPLY OUTLOOK:

The snowpack graph above tells the southwestern Utah snow story quite well. During February and March the snowpack has increased 74 and 95% more than usual respectively. The snowpack has increased from 44% of average on February 1 to 94% on April 1. Local streamflow forecasts have increased by 2 to 18% from the levels forecast last month following the increase in snowpack and now range from 76 to 88% of average. Reservoir storage in the area is about 68% of capacity.

For more information contact your local  
Soil Conservation Service Office:  
Cedar City Field Office 801-586-2429

E. GARFIELD, KANE, WASHINGTON, & IRON Co.

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG, (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
VIRGIN near Hurricane	APR-JUN	68.0	52.0	76	75.0	110	30.0	44
SANTA CLARA near Pine Valley	APR-JUN	5.0	4.2	84				
COAL CREEK near Cedar City	APR-JUL	20.0	17.6	88	23.0	115	13.0	65
LAKE POWELL inflow	APR-JUL	8886.0	7500.0	93	9764.0	121	5479.0	68

RESERVOIR	RESERVOIR STORAGE (1000AF)			WATERSHED SNOWPACK ANALYSIS				
	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	Avg.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
GUNLOCK	10.4	7.4	9.4	---	VIRGIN RIVER	5	110	86
LAKE POWELL	25002.0	21830.0	22015.0	---	PAROWAN	4	146	103
QUAIL CREEK	40.0	32.0	26.0	---	ENTERPRISE TO NEW HARMONY	2	1156	112
UPPER ENTERPRISE		NO REPORT			COAL CREEK	3	125	93
LOWER ENTERPRISE		NO REPORT			ESCALANTE RIVER	2	183	156
					E. GARFIELD, KANE, WASHIN	12	141	94

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

# SNOW MEASUREMENT DATA

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-65
ASHLEY TWIN LAKES	10500	04/02	63	13.9	27.0	17.4
ATWOOD LAKE	10500	04/02	45	9.9	18.3	12.0
BEAVER CREEK DIVIDE	8280	03/25	24	6.5	15.4	12.2
BEAVER DAMS	8000	03/24	29	8.4	8.5	12.1
BEN LOMOND PEAK	6000	03/24	77	26.7	57.4	39.3
BEN LOMOND TRAIL	6000	03/24	32	10.0	23.9	18.8
BEVAN'S CABIN	6450	04/01	41	13.8	6.2	12.1
BIG FLAT	10290	03/26	59	15.6	26.7	19.2
BIRCH CROSSING	8100	03/26	26	5.8	0.0	6.7
BLACK'S FLAT-U.M. CK	9400	03/24	37	9.0	9.8	11.5
BLACK'S FORK	9200	04/01	-	9.8E	14.2	14.2
BLACK'S FORK GS-EF	9340	03/26	36	8.0	11.7	9.7
BLACK'S FORK JUNCTN	8930	03/26	34	7.6	9.3	9.5
BOX CREEK	9300	03/24	41	9.8	12.8	14.1
BRIAN HEAD	10000	03/26	78	23.0	19.2	21.7
BRIGHTON	8750	03/25	67	21.5	-	37.6
BROWN DUCK RIDGE	10600	03/25	73	17.5	27.9	19.7
BRYCE CANYON	8000	03/26	18	4.7	0.0	4.2
BUCK FLAT	9800	03/24	46	12.1	20.3	17.9
BUCK PASTURE	9700	04/02	63	14.5	25.2	16.4
BUCKBOARD FLAT	9000	03/30	52	15.1	10.5	13.1
BUG LAKE	7950	03/24	47	10.9	29.1	20.4
BURT'S-MILLER RANCH	7900	03/25	18	5.1	3.6	6.0
CAMP JACKSON	8600	03/30	44	13.0	10.9	13.1
CASTLE VALLEY	9580	03/26	48	14.0	13.1	13.5
CHALK CREEK #1	9100	03/25	65	18.0	33.5	23.1
CHALK CREEK #2	8200	03/25	46	12.3	19.9	15.8
CHALK CREEK #3	7500	03/25	23	6.8	5.6	7.8
CHEPETA	10300	03/26	56	12.9	18.6	13.5
CHEPETA-WHITERKS. LK	10350	04/02	64	14.7	23.1	15.2
CLEAR CREEK MEADOWS	9420	03/24	60	17.4	23.4	24.1
CLEAR CREEK RIDGE #1	9200	03/25	44	12.2	22.0	19.5
CLEAR CREEK RIDGE #2	8000	03/25	37	9.7	15.4	14.7
CLEAR CREEK RIDGE #3	6600	03/25	9	3.0	1.6	6.1
CURRENT CREEK	8000	03/25	15	4.5	9.7	9.3
DANIELS-STRAWBERRY	8000	03/25	30	8.0	19.6	15.1
DESERET PEAK	9250	04/01	54	19.0	19.7	27.9
DILL'S CAMP	9200	03/24	33	8.1	12.8	12.8
DONKEY RESERVOIR	9800	03/24	59	14.0	7.2	7.9
DRY BREAD POND	8350	03/24	31	7.7	24.9	19.5
DUCK CREEK R.S.	8700	04/01	-	13.3E	7.0	14.2
EAST SHINGLE LAKE	9800	04/02	75	18.8	-	27.0
EAST WILLOW CREEK	8250	03/30	-	9.6E	-	11.1
FARMINGTON CANYON	8000	03/24	66	19.6	41.4	32.9
FARMINGTON CANYON L.	6950	03/24	57	16.4	29.4	25.2
FARNSWORTH LAKE	9600	03/24	75	20.3	17.9	20.6
FISH LAKE	8700	03/24	27	6.8	8.7	8.7
FIVE POINT LAKE	11000	04/02	62	14.3	24.3	16.3
G.B.R.C. HEADQUARTER	8700	03/25	55	14.4	18.7	18.3
G.B.R.C. MEADOWS	10000	03/25	71	19.7	26.3	25.0
GARDEN CITY SUMMIT	7600	03/24	33	7.9	24.9	18.3
GEORGE CREEK	8840	03/25	54	16.2	26.6	23.2
GOOSEBERRY R.S.	8000	03/24	47	12.5	9.9	12.8
HARDSCRABBLE	6700	03/24	40	11.4	22.3	19.4
HARRIS FLAT	7700	03/24	26	7.8	2.5	8.7
HAYDEN FORK	9400	03/25	46	11.2	19.5	16.0
HENRY'S FORK	10000	04/02	55	13.2	18.9	14.0
HEWINTA G.S.	9500	03/26	40	9.3	9.6	9.7
HOLE-IN-THE-ROCK	9150	03/26	34	7.0	6.1	6.1
HOLE-IN-THE-ROCK GS	8300	03/30	27	5.0	2.6	2.9
HICKERSON PARK	9100	03/26	41	8.4	7.0	7.1

## SNOW MEASUREMENT DATA (cont.)

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
HOBBLE CREEK SUMMIT	7420	03/25	27	8.2	17.3	14.8
HORSE RIDGE	8260	03/24	38	10.1	31.7	22.3
HUNTINGTON-HORSESHOE	9800	03/25	55	17.8	31.0	26.1
INDIAN CANYON	9100	03/25	45	11.3	19.8	13.5
JOHNSON VALLEY	8850	03/24	24	5.0	6.8	7.5
KILFOIL CREEK	7300	03/24	41	9.8	19.8	14.8
KIMBERLY MINE(UPPER)	9300	03/26	67	18.2	17.5	17.1
KING'S CABIN (UPPER)	8730	03/26	38	8.2	12.1	11.0
KLONDIKE NARROWS	7400	03/24	34	10.4	24.5	20.7
KOLOB-CRYSTAL	9250	03/24	67	18.0	21.2	23.3
LAKEFORK BASIN	11100	04/02	66	15.2	26.1	21.4
LAKEFORK MOUNTAIN #1	10200	03/25	45	10.2	16.8	11.7
LAKEFORK MOUNTAIN #3	8400	03/25	26	5.5	9.2	6.2
LAMBS CANYON	7400	03/30	46	15.4	18.2	16.8
LASAL MOUNTAIN LOWER	8800	03/31	43	12.4	7.4	10.1
LASAL MOUNTAIN (UPP)	9850	03/31	72	22.9	17.8	17.1
LIGHTNING LAKE	10500	04/02	81	20.2	33.5	23.8
LILY LAKE	9050	03/26	47	11.5	17.6	15.2
LITTLE BEAR (LOWER)	6000	03/24	21	6.7	4.2	10.2
LITTLE BEAR (UPPER)	6550	03/24	26	7.3	12.8	13.2
LITTLE GRASSY CREEK	6100	03/24	8	2.3	0.0	2.3
LONG FLAT	8000	03/24	34	10.6	0.9	7.0
LONG VALLEY JCT.	7800	03/24	5	0.8	0.0	3.6
LOST CREEK RESERVOIR	6130	03/24	7	1.2	0.0	4.0
MAMMOTH-COTTONWOOD	8800	03/25	43	12.2	30.5	22.6
MERCHANT VALLEY (UP)	8750	03/26	32	8.1	16.2	11.7
MIDDLE BEAVER CREEK	8650	03/30	28	6.4	2.1	5.2
MIDDLE CANYON	7000	04/01	49	17.0	6.9	15.0
MIDWAY VALLEY	9800	03/24	69	20.3	23.3	23.6
MILL CREEK	6950	03/30	54	17.1	21.6	22.0
MILL D SOUTH FORK	7400	03/31	46	16.2	18.2	20.3
MONTE CRISTO R.S.	8960	03/24	47	13.9	32.0	25.8
MOSBY MOUNTAIN(LOW)	9500	03/26	41	8.6	16.4	10.3
MT.BALDY R.S.	9500	03/24	65	18.4	28.2	25.0
MUD CREEK #2	8600	03/25	41	10.5	18.5	13.9
ONE MILE SUMMIT	7330	03/25	14	3.2	4.9	7.7
OTTER LAKE	9600	03/26	38	10.4	18.7	14.9
PANQUITCH LAKE	8200	03/26	22	6.4	0.0	4.5
PARADISE PARK	10100	03/26	52	12.6	20.2	14.1
PARLEY'S CANYON BUM.	7500	03/30	52	15.6	20.4	19.2
PAYSON R.S.	8050	03/25	52	16.6	17.2	19.7
PICKLE KEG SPRING	9600	03/24	49	13.0	13.3	17.2
PINE CANYON	8000	03/24	42	11.0	24.8	20.0
PINE CREEK	8800	03/26	60	17.0	15.2	17.2
REDDEN MINE LOWER	8500	03/26	41	11.1	24.8	18.8
RED PINE RIDGE	9200	03/25	46	12.5	18.3	18.0
REE'S FLAT	7300	03/25	28	8.9	13.1	13.8
REYNOLDS PARK	10400	04/02	67	15.4	26.7	17.7
ROCK CREEK	7900	03/26	22	6.3	9.7	6.8
ROCKY BASIN-SETTLEMNT	8900	04/01	80	27.0	25.4	29.1
SEELEY CREEK R.S.	10000	03/25	51	14.7	21.9	18.2
SERGEANT LAKES	8300	04/02	35	9.1	10.5	18.8
SHINGLE MILL	6200	03/30	32	9.6	4.1	9.5
SILVER LAKE(BRIGHT.)	8730	03/31	62	19.3	33.0	26.3
SMITH & MOREHOUSE	7600	03/25	35	9.5	14.2	13.6
SNOWBIRD GAD VALLEY	9700	03/23	106	33.0	46.0	34.9
SOAPSTONE R.S.	7800	04/01	-	7.2E	15.0	12.1
SPIRIT LAKE	10300	03/26	68	16.8	14.1	13.5
SQUAW SPRINGS	9300	03/24	24	5.8	6.2	7.6

## SNOW MEASUREMENT DATA (cont.)

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-86
STEEL CREEK PARK	10100	03/26	66	16.3	20.9	16.4
STILLWATER CAMP	8550	03/26	35	7.7	12.3	11.0
STRAWBERRY DIVIDE	8400	03/31	41	11.6	23.1	19.9
STUART R.S.	7950	03/25	19	5.9	10.8	8.2
SUSC RANCH	8200	03/26	33	7.9	0.0	7.9
TALL POLES	8800	03/26	55	12.4	12.0	15.5
THAYNES CANYON	9200	04/01	61	18.5	28.0	-
THISTLE FLAT	8500	03/25	52	13.9	18.4	17.8
TIMPANOOGS DIVIDE	8140	03/25	42	13.0	33.5	25.6
TONY GROVE LAKE	8400	03/24	59	17.0	56.0	37.1
TONY GROVE R.S.	6250	03/24	20	5.8	11.9	12.1
TRIAL LAKE	9960	03/25	58	14.2	38.7	24.7
TROUT CREEK	9400	03/26	46	9.9	12.0	11.2
UPPER JOES VALLEY	8900	03/25	28	6.7	10.8	10.9
VERNON CREEK	7500	04/01	23	5.9	8.8	10.7
VIPONT	7670	03/25	34	9.8	20.0	16.5
WEBSTER FLAT	9200	03/24	58	16.6	14.3	18.8
WHITE RIVER #1	8550	03/25	36	9.1	17.4	14.0
WHITE RIVER #3	7400	03/25	14	4.7	0.0	7.3
WIDTSOE-ESCALANTE #3	9500	03/24	65	17.4	10.1	12.3
WRIGLEY CREEK	9000	03/24	37	9.9	12.1	11.9
YANKEE RESERVOIR	8700	03/26	46	13.2	6.9	10.4



United States  
Department of  
Agriculture

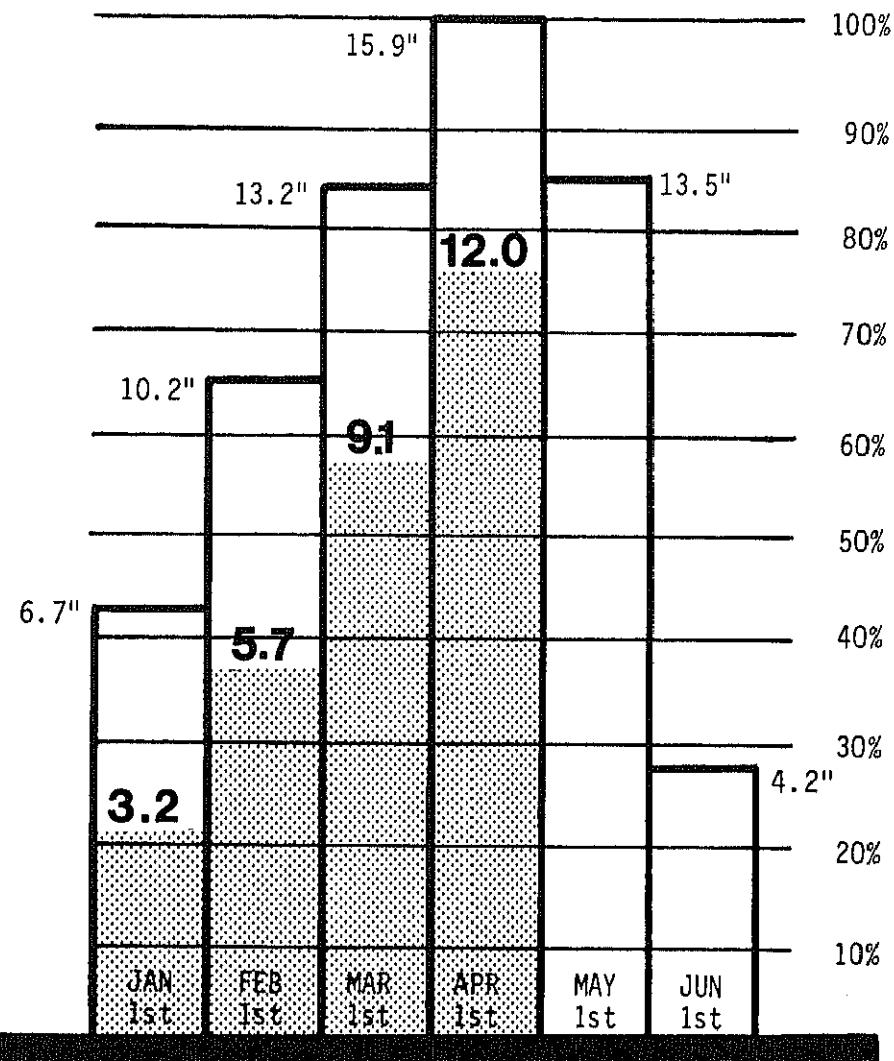
Soil  
Conservation  
Service

Salt Lake City,  
Utah



# Utah Snowpack Progress

1987



## Statewide

### NOTE :

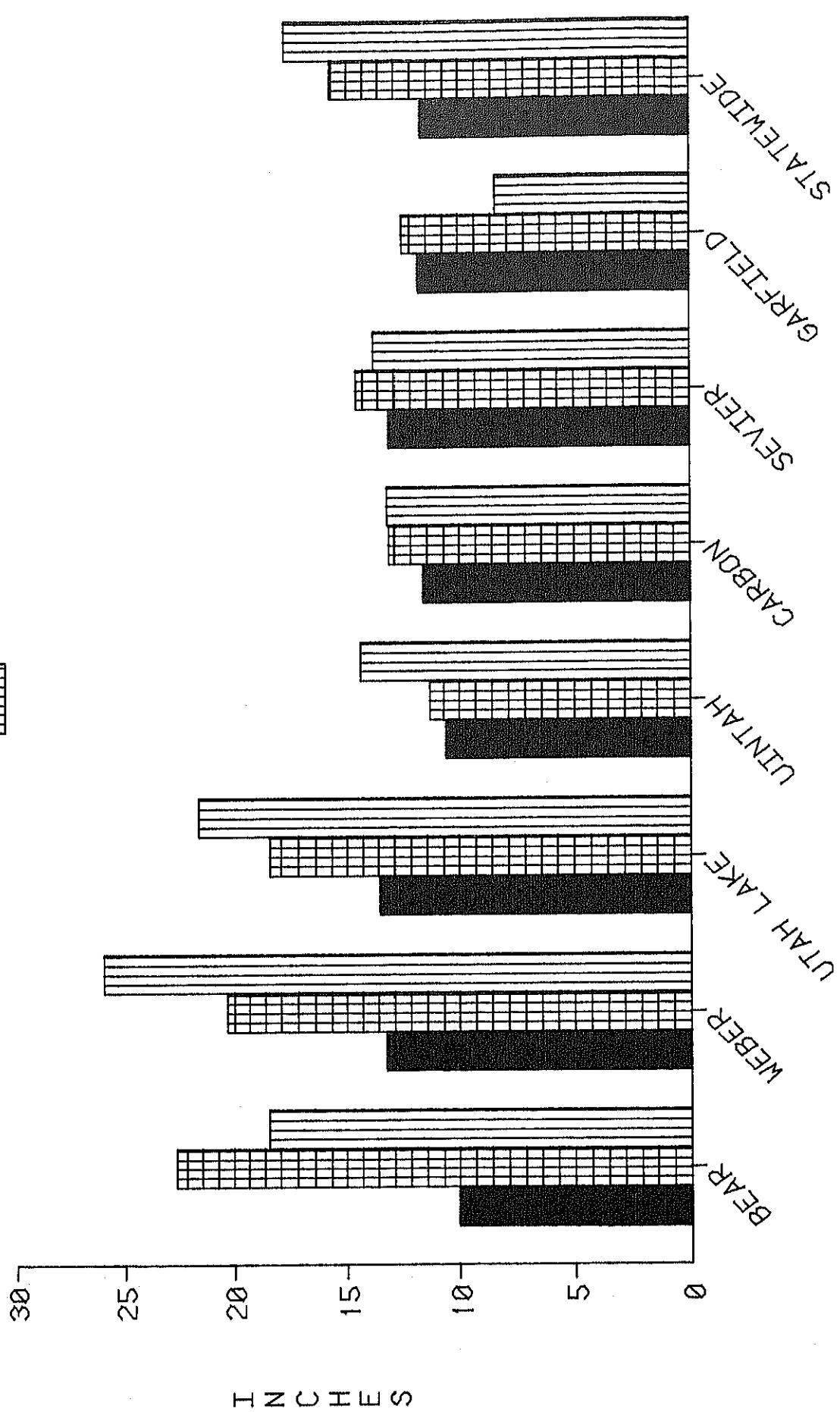
Snow water equivalent in inches is compared to the highest seasonal amount ( 100% ). Monthly averages are accumulated by basin/state.

Averages are for the period 1961-1985.

1987 SNOWPACK COMPARISON

April 1, 1987

04/01/87 PROV. DATA  
04/01/86



# The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

## **State**

Utah State University  
Utah State Department of Natural Resources  
    Division of Wildlife Resources  
    Division of Water Resources  
    Division of Water Rights  
    Bear River Commissioner  
    Price River Commissioner  
    Provo River Commissioner  
    Sevier River Commissioners  
    Spanish Fork River Commissioner  
    Utah Lake and Jordan River Commissioner

## **Federal**

U.S. Department of Agriculture  
    Soil Conservation Service  
    Forest Service  
U.S. Department of Commerce  
    NOAA, National Weather Service  
U.S. Department of Interior  
    Bureau of Reclamation  
    Geological Survey  
    National Park Service

## **Municipality**

Manti  
Salt Lake City

## **Public**

Beaver River Water Users Association  
Board of Canal Presidents - Jordan River  
Central Utah Conservancy District  
Emery Canal and Reservoir Company  
Moon Lake Water Users Association  
Ogden River Water Users Association  
Provo River Water Users Association  
Strawberry Water Users Association  
Sevier River Water Users Association  
Weber River Water Users Association  
Weber Basin Conservancy District

Other organizations and individuals furnish  
information for the snow survey reports.  
Their cooperation is gratefully acknowledged.

All programs and services of U.S. Dept.  
of Agriculture are available to everyone  
without regard to race, creed, color, sex,  
age, handicap, or national origin.